[15]*Polytechnic University of the Marche Region, Section of Pathological Anatomy, Ancona, Italy*
[16]*Campus Bio-Medico University, Department of Urology, Rome, Italy*
[17]*Malzoni Center, Department of Nephrourolog, Avellino, Italy*
[18]*Abano Terme General Hospital, Department of Urology, Padua, Italy*
[19]*University of Rome La Sapienza - S Andrea Hospital, Urology, Rome, Italy*
[20]*Istituto Oncologico Veneto IOV – IRCCS, Medical Oncology, PaduaPadua, Italy*
[21]*Padua University, Urology Clinic, Padua, Italy*

Purpose or Objective: PROS-IT is a national, multicenter, observational prospective cohort study on prostate cancer (PCa) coordinated by the Italian National Research Council, aiming at a comprehensive evaluation of the impact of PCa and its treatment in an unselected aging population. Present analysis evaluates the frequencies of the different comorbidities and medications in the study population at diagnosis.

Materials and Methods: 1684 patients (pts) consecutively enrolled 9/2014 to 7/2015 in 96 Institutions were submitted to a structured interview to record comorbidities and drugs assumption. The severity of comorbidities was measured with the Cumulative Illness Rating Scale (CIRS). Quality of life (QoL) was assessed by the SF-12 questionnaire (PCS = Physical and MCS = Mental Component Summary) and through the Italian UCLA P Ca Index (Function/Bother: UF,UB=Urinary , SF,SB=Sexual , BF,BB=Bowel). Differences between pts enrolled by Urology [URO] and Radiation Oncology Centers [RO] were assessed with logistic regression and/or general linear models.

Results: 996/1684 (59.1%) and 688/1684 (40.9%) pts were respectively enrolled by URO and RO Centers; CIRS data were available for 1637 pts. RO pts were older (average 71.9 yrs vs 66.4, p<0.0001), with more advanced T category (T1 cases: 38% vs 54.6%, p<0.0001). 445/1684 (27.2%) pts suffered from vascular, lymphatic or hematopoietic moderate, severe or very severe (MSVS) diseases; 304/1684 (18.6%) from heart MSVS disease; 231/1684 (14.2%) had gastro-intestinal problems; 163/1684 (10%) neurological diseases. The presence of ≥3 MSVS comorbidities had a significant negative impact on PCS, MCS, UB, BF and BB, SF if compared to 0-2 MVSV comorbidities (p<0.001).Diabetes was more frequent in RO pts than in URO ones (18.4% vs.11.4%, p=0.0082); MSVS gastrointestinal disease (18.8% vs. 7.5%), abdominal hernia (5.7% vs. 4.8%), and neurological disease (11.4% vs. 7.9%) in URO pts. 74.3% of the pts use drugs for vascular disease, 36.7% antithrombotic agents, 34.2% digestive drugs, 14.4% hypoglycemic drugs, 31.6% drugs for low urinary tract symptoms. A significant difference between URO and RO populations in the use of antithrombotic agents was evident: 32.5% URO vs. 44% RO (p=0.0377).

Conclusion: This study shows that number and severity of comorbidities had a negative impact on QoL at the time of diagnosis of PCa. Moreover, men enrolled in URO and RO Centers present a different pattern of associated diseases/medications.

Proffered Papers: Brachytherapy 2: EYE GI

OC-0147
Organ preservation in T2 T3 NX M0 rectal. French results using the new Papillon 50TM machine

J.P. Gérard[1], A. Frin[2], J. Doyen[1], N. Barbet[3], R. Coquard[4], K. Benezery[1], S. Marcié[5]
[1]*Centre Antoine Lacassagne, Radiotherapy, Nice, France*
[2]*CHU Nice, Gastroenterology, Nice, France*
[3]*Centre Radiotherapie, Radiotherapy, Macon, France*
[4]*Centre Bayard, Radiotherapy, Lyon-Villeurbanne, France*
[5]*Centre Antoine Lacassagne, RadioPhysic, Nice, France*

Purpose or Objective: Contact X Ray Brachytherapy (CXB) was pioneered in France for conservative treatment of rectal cancer using the Philips RT 50TM machine. Since 2009 the new Papillon 50TM was manufactured. It delivers high dose rate (20 Gy/ mn) well targeted dose (30 Gy) into the rectal tumor using an endoscopic approach. For T2 T3 CXB is always combined with external beam Radiotherapy(EBRT) or with chemoraradiotherapy (CRT). Three centers have been treating patients in France with such regimen in Lyon-Villeurbanne, Mâcon and Nice.

Material and Methods: All patients presented adenocarcinoma of the distal or middle rectum. Staging used Digital examination, endoscopy, MRI and or Endorectal ultrasound. CXB dose was 90Gy in 3 fractions (Day 1- 14 -28) and EBRT delivered 50 Gy/25 fr/5 weeks usually with concurrent capecitabine (800 mg/m2 BID). After clinical complete response (cCR) either watch and Wait (W§W) or Local excision (LE) was proposed.

Results: Between 2009 and 2014, 44 patients were treated. All these patients were either high surgical risk, refusal of surgery or referred after MDT approval for such a conservative approach Results are shown in Table .

Centre	N° pts	T2	T3	cCR	Loc. Rec.	Organ Preserv	Surv. 3 years
Mâcon	14	6	8	10	3	9	75%
Nice	22	13	9	20	2	21	70%
Villeurbanne	8	6	2	8	1	7	87%
Total	44	25	19	89% (38)	13% (6)	83% (37)	77%

Conclusion: The present early results achieved with the Papillon 50 machine are at least equivalent to the previous one using Philips RT 50. CXB technique is validated in France for rectal cancer since 2008 (HAS) and recently in UK (NICE). Organ preservation using CXB in frail, elderly patients is a well admitted treatment and the ongoing OPERA trial is aiming at showing its benefit in operable patients. Gerard JP et al. Acta Oncol. 2015 Apr;54(4):545-51.

OC-0148
Evaluation of EBRT and HDRBT for inoperable rectal cancer patients: an update of the HERBERT study

E.C. Rijkmans[1], L.A. Velema[1], A. Cats[2], K.J. Neelis[1], Y.M. Van der Linden[1], R.A. Nout[1], B. Van Triest[3], J. Buijsen[4], T. Rozema[5], M. Ketelaars[1], C.A.M. Marijnen[1]
[1]*Leiden University Medical Center LUMC, Department of Radiotherapy, Leiden, The Netherlands*
[2]*The Netherlands Cancer Institute, Department of Gastroenterology and Hepatology, Amsterdam, The Netherlands*
[3]*The Netherlands Cancer Institute, Department of Radiotherapy, Amsterdam, The Netherlands*
[4]*MAASTRO Clinic, Department of Radiotherapy, Maastricht, The Netherlands*
[5]*Verbeeten Institute, Department of Radiotherapy, Tilburg, The Netherlands*

Purpose or Objective: TME surgery, with or without pre-operative (chemo-)radiotherapy is the standard of care in patients with resectable rectal cancer. In patients unfit for surgery, radiotherapy alone is often used with palliative intent. However, complete response can be achieved when high doses are administered. In this study we examined the feasibility of external beam radiotherapy (EBRT) followed by an endorectal brachytherapy boost in elderly patients, unfit for surgery. Primary results, presented at ESTRO 2014, are now complemented with response assessment and long-term FU at 3 years.

Material and Methods: A dose finding feasibility study was performed from 2007 to 2013 in two hospitals in inoperable rectal cancer patients. Treatment consisted of EBRT (13x3